



CHARTER of the
INTELLIGENT ROBOTICS AND AUTONOMOUS SYSTEMS INTERAGENCY WORKING GROUP
SUBCOMMITTEE ON NETWORKING AND INFORMATION TECHNOLOGY RESEARCH AND
DEVELOPMENT
COMMITTEE ON TECHNOLOGY
NATIONAL SCIENCE AND TECHNOLOGY COUNCIL

A. Official Designation

The Intelligent Robotics and Autonomous Systems¹ (IRAS) Interagency Working Group (IWG) is hereby established by action of the Subcommittee on Networking and Information Technology Research and Development (NITRD) of the National Science and Technology Council (NSTC) Committee on Technology (CoT)².

B. Purpose

The IRAS IWG coordinates NITRD agency research and development (R&D) programs, budgets, and policy recommendations, focusing on the advancement of intelligent robotics and autonomous systems that complement, augment, enhance, or emulate human physical capabilities or embodied human intelligence. This includes identifying and pursuing current and emerging topics of mutual interest to the member agencies; launching of taskforces to examine specific timely research topics and opportunities; coordinating major interagency outreach activities; and facilitating the development and sharing of data, models, software tools, and testbeds among NITRD agencies and stakeholders.

C. Objectives

The scope of activities for the IRAS IWG includes:

- Establishing a framework of research directions in IRAS R&D that addresses the needs of government and industry, taking into account current federally funded programs, R&D, and industry perspectives; this framework should be developed in consultation with the NSTC Subcommittee on Machine Learning and Artificial Intelligence, and other appropriate NITRD subgroups.
- Maintaining close interactions with any OSTP regulatory policy groups, focusing on autonomous systems and regulations.

¹ The IRAS IWG was formerly the Robotics and Intelligent Systems (RIS) until its name change on February 21, 2017.

² The NSTC/CoT/NITRD was originally chartered on December 10, 1991. The most recent charter was signed July 10, 2013.

- Identifying opportunities for collaboration, coordination, and leveraging among agencies in specific areas in IRAS R&D to include autonomy, test beds, and teams of autonomous systems (e.g., robots, sensor networks, humans, working and service animals, etc.).
- Promoting interagency coordination to develop recommendations for Federal IRAS R&D priorities to address IRAS R&D gaps.
- Engaging international entities to understand further their research directions and challenges in IRAS R&D.
- Holding workshops to include broader participation among IRAS IWG agencies, academia, and industry to identify gaps in IRAS R&D.
- Publishing workshop reports and other summary documents containing findings and recommendations that assist agencies in the pursuit of IRAS R&D.
- Coordinating major outreach activities to showcase the impact of IRAS R&D Federal investments.

D. Functions

The IRAS IWG shall perform the following functions:

- Across-agency coordination
 - Coordinate and collaborate across Federal agencies, other NITRD bodies, and other NSTC committees as appropriate on issues of mutual interest.
 - Develop and maintain strong and forward-looking agendas that represent the current and future evolution of Information Technology Research and Development (IT R&D).
 - Identify interagency and cross-cut opportunities for collaboration, coordination, and leveraging among agencies in specific areas in IT R&D.
 - Provide a forum for agencies to exchange program-level information about agency activities (Annual Planning Meeting or Data Call).
 - Select and maintain collegial leadership and dynamic membership.
- Work with the NITRD Program
 - Develop, maintain, and periodically update interagency short-, mid-, and/or long-range strategic plans and priorities.
 - Participate and support NITRD outreach (workshops, conferences, and other meetings) to support the IWG's agenda.
 - Prepare and maintain an active charter with a specific purpose and objectives.
 - Provide inputs to NITRD's annual Supplement to the President's Budget³.
 - Provide inputs to NITRD's annual Activities Report summarizing the IWG's activities.

³ The IWG's activities will be reported to the appropriate Program Component Areas (s) (PCAs).

- Schedule and participate in regularly scheduled and ad hoc meetings, and maintain documentation of the meeting discussions.
- Work with other stakeholders
 - Assist and support the NITRD Subcommittee in responding to the recommendations of the President’s Council of Advisors on Science and Technology (PCAST), and responding to inquiries from NSTC, Office of Science and Technology Policy (OSTP), Office of Management and Budget (OMB), and Congress.
 - Provide inputs to NSTC strategic and Federal Plans when requested.

E. Membership

The following NITRD Member agencies are represented on the IRAS IWG⁴:

- Department of Commerce;
- Department of Defense (Co-chair);
- Department of Energy;
- Department of Homeland Security;
- Department of Justice;
- Environmental Protection Agency;
- National Archives and Records Administration;
- National Aeronautics and Space Administration;
- National Institutes of Health; and
- National Science Foundation (Co-chair).

The following organizations of the Executive Office of the President may also be represented on the IRAS IWG:

- Office of Management and Budget; and
- Office of Science and Technology Policy (Co-chair).

Federal departments, agencies, and councils that participate in the IRAS IWG’s activities include:

- Department of Transportation;
- Department of Treasury; and

such other Executive organizations, departments, and agencies as the Subcommittee or IWG Co-chairs may designate as appropriate.

F. Leadership

The Co-chairs of the IRAS IWG shall be named and approved by the NITRD Subcommittee Co-chairs.

⁴ Changes to membership may occur without requiring a charter amendment. After charter ratification, membership and changes to membership may be tracked in a separate document.

G. Private-Sector Interface

The IRAS IWG may work with appropriate private-sector⁵ entities, including the President's Council of Advisors on Science and Technology, and will recommend to the NITRD Subcommittee and/or the Assistant to the President for Science and Technology the nature of any additional advice needed to accomplish its mission. The IRAS IWG may interact with and receive *ad hoc* advice from various private-sector groups, consistent with the Federal Advisory Committee Act (FACA).

H. Resources

The NITRD NCO shall provide project management, technical, information technology/networking, and administrative support services to the IRAS IWG as part of its responsibilities to the NITRD Subcommittee.

I. Termination

Unless renewed by the Co-chairs of the NITRD Subcommittee prior to its expiration, the IRAS IWG shall terminate no later than December 30, 2017.

J. Determination

I hereby determine that the establishment of the Intelligent Robotics and Autonomous Systems Interagency Working Group is in the public interest in connection with the performance of duties imposed by the Executive Branch by law, and that such duties can be performed through the advice and counsel of such a group.

Approved:

Bryan A. Biegel 2/21/2017

James Kurose 2/21/2017

Bryan A. Biegel, Ph.D. Date
Co-chair
Subcommittee, Networking and Information
Technology R&D

James Kurose, Ph.D. Date
Co-chair
Subcommittee, Networking and Information
Technology R&D

⁵ The Federal Advisory Committee Act, 5 U.S.C. App., as amended, does not explicitly define "private sector", but the phrase is generally understood to include individuals or entities outside the Federal government such as, but not limited to, the following: non-Federal sources, academia, State, local or tribal governments, individual citizens, the public, non-governmental organizations, industry associations, and international bodies.